



# California Regional Water Quality Control Board

## Los Angeles Region



Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

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File A1719 Deadline:  
March 22, 2006

March 7, 2006

Ms. Tam M. Doduc, Chair  
C/O Ms. Selica Potter  
Acting Clerk to the Board  
State Water Resources Control Board  
P.O. Box 100  
Sacramento, CA 95812-0100



Dear Chair Doduc:

PETITION OF WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA, WATEREUSE ASSOCIATION, AND COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY (WASTE DISCHARGE AND WATER RECYCLING REQUIREMENTS FOR ALAMITOS BARRIER RECYCLED WATER PROJECT, ORDER NO. R4-2005-0061), LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD COMMENTS TO THE DRAFT WATER QUALITY ORDER (SWRCB/OCC FILE A-1719)

The Los Angeles Regional Water Quality Control Board (Regional Board) has reviewed the February 7, 2006, Draft Water Quality Order for the above-referenced petition, and has serious concerns about its adoption by the State Water Resources Control Board (State Water Board). Our concerns are discussed separately below. Briefly, the policy determination articulated in the draft order would inhibit the Regional Board's ability to protect groundwater resources, and is in tension with the Regional Board's cleanup authority, as expressed in State Water Board's Cleanup Policy, Resolution 92-49.

1. The draft order appears to be stating that the Regional Board included Department of Health Services (DHS) notification levels as effluent limits in the water reclamation requirements (WRRs), when in fact the order relied upon the standard risk assessment and exposure assumptions that underlie the notification levels. In so doing, the draft order suggests that the Regional Board may not use standard risk assessments and exposure assumptions to implement the narrative groundwater objective.

The draft order suggests that the WRRs adopted DHS' notification levels as effluent limitations. That is incorrect. Nowhere do the WRRs or the record suggest that the reason effluent limitations were imposed for the Chemicals of Concern was because the limits were coextensive with DHS notification levels. Rather, the WRRs state that the identified Chemicals of Concern, which do not yet have MCLs, may nevertheless be a threat to water quality. (WRRs p. 13, para.

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23.D.) The Regional Water Board expressly stated that the effluent limits were established "based on the standard risk assessment methods for non-cancer and cancer endpoints, and typical exposure assumptions, including a 2-liter per day ingestion rate, a 70-Kilogram adult body weight, and a 70-year lifetime." (*Id.*)

This is not a matter of semantics. Is one thing to say that notification levels should not be used; it is another to say that standard risk assessment methods and exposure assumptions should not be used either. Though the numbers are the same, the effluent limitations are based on the latter. The draft order devotes much attention to explaining why DHS' notification levels, under statutes applicable to DHS, are not regulatory and should not be used as such. That begs the question of why the effluent limitations, based on risk assessment and exposure assumptions should not be used either. As the draft order agrees, the regional water boards typically use scientific studies that have not been adopted as regulations to interpret their narrative surface and groundwater objectives. (See pp. 3-4.) Nothing in the draft order explains why scientific determinations based on standard risk assessment methods do not represent attainment of the narrative objective. Yet, the draft order would delete all effluent limitations for all of the Chemicals of Concern. The draft order therefore, if adopted, could seriously undermine the integrity of all narrative objectives.

If it is the State Water Board's intent that the Regional Water Board should not impose groundwater effluent limitations in the absence of MCLs, the order should expressly say so, and explain why. As written however, only the fact that the effluent limitations are coextensive with DHS' notification levels renders their inclusion inappropriate. The Regional Board submits that the fact that a study's conclusions have or have not been adopted as notification levels is an arbitrary means of determining which may be used to interpret narrative objectives.

2. **While the draft order concludes that concentrations of chemicals above notification levels "will not violate the narrative water quality objective", the order does not explain what measure the Regional Board should use to interpret violations of narrative objectives when no relevant MCLs exist.**

The Los Angeles Basin Plan includes the following narrative groundwater objective.

"Ground waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use." (Basin Plan, p. 3-18.)

The draft order recites:

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“While there may be instances where it is appropriate to require non-detection or notification levels in permits, we do not agree that concentrations of chemicals above notification levels will violate the water quality of objective that requires that there be no chemical constituents in amounts that adversely affect municipal use of ground waters.” (Draft Order, p. 7.)

Aside from the fact that no scientific findings support that conclusion, it is problematic for at least two more reasons. First, the fact that a notification level has been established does not alter the chemical’s effect upon beneficial uses. Either the scientific conclusions underlying the notification levels demonstrate an adverse affect on beneficial uses, or they do not. But the establishment of that conclusion as a notification level or as an MCL does not alter the toxicity of the constituent.

Second, if it is the State Water Board’s determination that the standard risk assessment methods and typical exposure assumptions are not a valid measure of an adverse effect on ground water beneficial uses, the order should plainly state what a valid measure of attainment would be. When implementing this narrative objective, just as with every other narrative objective in the Basin Plan, the Regional Water Board looks to a variety of published scientific studies to determine what numerical levels would be consistent with attainment of the objective. This draft order would remove from the regional boards’ use what in many cases are the only scientific studies available to interpret objectives. That renders the narrative objectives unusable. We do not believe it appropriate to undercut the efficacy of narrative objectives in such a manner.

**3. Contrary to *Olin* and Water Code section 13540, the draft order would compel the regional boards to yield responsibility for protecting a groundwater aquifer to another agency that is not charged with protecting all of the resource’s beneficial uses.**

The draft order alleges that “the public health is clearly being protected, especially where DHS has fully approved the project and has, itself, discouraged the use of notification levels as effluent limitations.” (Draft order, p.6.) In other words, the draft order would hold that the Regional Water Board should have deferred to DHS’ determinations about the appropriateness of requirements to protect the aquifer. To support this finding, the draft order cites to *In the Matter of the Petitions of Olin Corporation and Standard Fusee, Inc.*, WQO 2005-0007. The finding, however, is inconsistent with *Olin*. Moreover, the draft order would vastly expand *Olin* by suggesting that *Olin*’s holding refers to all contamination, not just to the requirement to provide replacement drinking water. The draft order states:



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“In [*Olin*] we stated: ‘the Water Boards should defer to [Office of Environmental Health Hazard Assessment] and DHS in determining the appropriate level of contamination’ at which to require the replacement of a source of drinking water.

(Draft order, p. 6.) In fact, the entire sentence should be within the internal quotation marks, not only through the word “contamination”. While it may be a typographical error, the misplaced quotation mark in the draft order lends a conclusion that *Olin* required deference to DHS and OEHHA to determine appropriate levels of contamination for all purposes, when in fact the holding was appropriately limited to deference in determining when an alternative source of drinking water should be required. Contrary to the conclusions of the draft order, *Olin*’s holding was expressly limited to replacement drinking water, and expressly excluded the level of water quality necessary to protect the aquifer. In *Olin*, the State Water Board held that it was inappropriate for a regional water board not to defer to the Office of Environmental Health Hazard Assessment and DHS *when requiring replacement drinking water service requirements*. While the State Water Board required deference to those agencies for drinking water replacement, the State Water Board nevertheless stated:

“By contrast, cleanup levels for groundwater are a separate issue and are more appropriately within the expertise and professional purview of the water boards.”

(*Olin*, WQO 2005-0007, p.6.) Certainly, determining what quality of water should be delivered to households is within the sound discretion of the DHS. But, the level of water quality that should exist in the groundwater aquifer is within the expertise and should remain within the purview of the water boards, that must protect all of the aquifer’s beneficial uses, and not just the municipal uses referenced in the draft order.

The draft order is also inconsistent with Water Code section 13540. Section 13540(b)(1) requires that both the Regional Board *and* the DHS must find that a recharge project is protective of water quality before it may occur. The draft order ignores the statutory requirement of the water boards’ participation in this process.

Finally, the draft order creates a tension with the State Water Board’s Cleanup Policy. That policy states:

“This section authorizes Regional Water Boards to require complete cleanup of all waste discharged and restoration of affected water to background conditions (i.e., the water quality that existed before the discharge).”

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(See State Water Board Resolution 92-49, *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304*, section 4.) Certainly if the Regional Board is authorized to require cleanup to background levels, it should not be precluded from preventing discharge above background levels in the first place. If the State Water Board is inclined to amend Resolution 92-49, the Regional Board would respectfully submit it should do so in the context of a proper rulemaking proceeding, to allow all interested stakeholders to participate in the decision, and not merely the few who are participants in the permitting action.

**4. The Draft Order Does Not Adequately Recognize the Effects of Diazinon, Perchlorate, and Other Chemicals of Concern Which Cannot be Readily Removed From the Aquifer Once Injected**

The draft order alleges that the public water supplies are “fully” protected by the highest levels of treatment available (Draft order, p.6), yet the draft order itself acknowledges that is not the case—if it were, there would be no risk of violation of the effluent limitations. In reality, no technology can “fully” protect the water supply, and the draft order’s overstatement in that respect falsely suggests to the public that no risks are attendant with the injection project. There are. Nevertheless, the law mandates that the Water Boards regulate waters to attain the highest water quality which is “reasonable”. The debate here, therefore, should not be based on a pretext that any technology can provide full protection, but upon what is reasonable.

Contrary to the conclusions of the draft order, the Regional Board does appreciate the need for recycled water, and the requirements of Water Code section 13576. The Regional Board also recognizes, however, that the loading of anthropogenic compounds such as diazinon and the other chemicals of concern to underground aquifers is particularly problematic. Waste discharged into underground aquifers is technically difficult to remove and can be extremely costly, if not impossible, to remediate. Moreover, a contaminated groundwater resource may become unsuitable for beneficial use, and may become unsuitable for a lengthy period of time.

For example, if local groundwater supplies cannot be used for drinking water due to perchlorate contamination, water purveyors have limited options to replace the water when the wells are shut down, such as using other groundwater supplies, purchasing imported water at a much higher cost or trying to treat the groundwater to remove perchlorate. Local groundwater supplies can generally be produced at a cost of approximately a \$100 per acre-foot or less, as compared to \$460 per acre-foot for imported water. Ion exchange treatment technology, demonstrated to be able to remove perchlorate in groundwater to make it suitable for drinking water, can add

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additional costs of up to \$125 per acre-foot in addition to any other treatment. (Transcripts of September 1, 2005, Regional Board Hearing, beginning on Page 43, Line 17).

DHS has already recognized that many of these chemicals of concern, such as perchlorate, 1,2,3-trichloropropane, and 1,4-dioxane, are being found in aquifers throughout the State. 1,4-dioxane began to be detected in several drinking water wells in Orange County where additional groundwater treatment was required before the water could be used for drinking water (Transcripts of September 1, 2005, Regional Board Hearing, beginning on Page 92, Line 19).

These issues are sorely reminiscent of the MTBE problems that were created in the 1990s, when dischargers were authorized to discharge MTBE to the aquifers in advance of the establishment of regulatory levels. That has resulted in the expenditure of hundreds of millions of dollars in cleanup efforts. The Regional Board would request the State Water Board not compel it to risk repeating those mistakes.

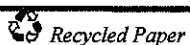
In conformance with the State Antidegradation Policy's command to maintain "the highest water quality consistent with the maximum benefit to the people of the State" Regional Boards must have particular sensitivity when considering allowing recycled water containing waste to be injected into a groundwater aquifer because the costs incurred to the people of the State from loss of a drinking water aquifer from the chemicals of concern may easily outweigh the benefits from utilizing recycled water. However, by applying limitations based upon standard risk assessment methods, a balance can be struck between protecting the municipal beneficial use of the aquifers for future generations and the beneficial reuse of recycled water. It is not unreasonable to ensure through enforceable limits, that water being injected into our aquifers at least is so protective, especially when all parties agree that the technology, if properly implemented, would achieve those results.

Thank you very much for your consideration. If you have any questions, please contact Blythe Poniek-Bacharowski at (213) 576-6720.

Sincerely,  
*Original signed by:*

Jonathan S. Bishop  
Executive Officer

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**From:** Blythe Ponck-Bacharowski  
**To:** Potter, Selica  
**Date:** 3/8/2006 10:01:04 AM  
**Subject:** Comments on Proposed WQO-Alamitos Barrier Project A-1719

Hi Selica

Attached are Region 4's Comments on the State Board's proposed Water Quality Order for the Alamitos Barrier Project Petition File A-1719. I have also FAXed you a copy.

Thanks

Blythe

Blythe Ponck-Bacharowski  
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**CC:** Bishop, Jonathan ; Levy, Michael; Marshack, Jon; McChesney, Frances; Smith, Deborah; Wyels, Philip